

**661—226.1 (101) General requirements.** The provisions of the International Fire Code, Chapter 38, 2009 edition, published by the International Code Council, 5203 Leesburg Pike, Suite 600, Falls Church, VA 22041, and all references contained therein, are hereby adopted by reference as the general requirements for transportation, storage, handling, and use of liquefied petroleum gas, with the following amendments:

Delete section 3801.1 and insert in lieu thereof the following new section:

**3801.1** Scope. Storage, handling and transportation of liquefied petroleum gas (LP-gas) and the installation of LP-gas equipment pertinent to systems for such uses shall comply with this chapter, NFPA 54, ANSI Z223.1-2009 National Fuel Gas Code, 2009 edition, and NFPA 58, Liquefied Petroleum Gas Code, 2008 edition, with the following amendments:

Amend NFPA 54, ANSI Z223.1-2009 National Fuel Gas Code, 2009 edition, as follows:

Delete section 7.3.5.2 and insert in lieu thereof the following new section:

**7.3.5.2** Gas piping underground, outside a building, shall not be in physical contact with any concrete. Where it is necessary to install piping that will extend through or under an exterior concrete slab for connection to a regulator or other part of the system, before entering a building, the gas piping shall be sleeved. The sleeve shall extend through the concrete and be sealed only at the end extending above grade to prevent the entrance of insects, debris, or moisture. All piping, fittings, and risers shall be protected against corrosion in accordance with NFPA 54, National Fuel Gas Code, 2009 edition, section 5.6.6.

Delete section 8.2.1 and insert in lieu thereof the following new section:

**8.2.1** Leak checks using fuel gas (propane vapor) shall be permitted in piping systems that have been pressure-tested in accordance with 661—subrule 226.5(1).

Amend NFPA 58, Liquefied Petroleum Gas Code, 2008 edition, as follows:

Properties of LP-gases shall be determined in accordance with Annex B of NFPA 58.

Delete section 5.2.3 and insert in lieu thereof the following new section:

**5.2.3** DOT cylinders in stationary service that are filled on site and therefore are not under the jurisdiction of DOT shall be either requalified in accordance with DOT requirements or visually inspected within 12 years of the date of manufacture and every 5 years thereafter, in accordance with 5.2.3.1 through 5.2.3.3. The effective date for qualification and requalification requirements of this section shall be July 1, 2010.

**5.2.3.1** Any cylinder that fails one or more of the criteria in 5.2.3.3 shall not be refilled or continued in service until the condition is corrected.

**5.2.3.2** Personnel shall be trained and qualified to perform inspections. Initial and refresher training shall be in accordance with rule 661—226.4(101).

**5.2.3.3** Visual inspection shall be performed in accordance with the following:

(A) The cylinder is checked for exposure to fire, dents, cuts, digs, gouges, and corrosion according to CGA C-6-2007, Standards for Visual Inspection of Steel Compressed Gas Cylinders, ninth edition, except that paragraph 5.2.1.1(1) of that standard (which requires tare weight verification) shall not be part of the required inspection criteria.

(B) The cylinder protective collar (where utilized) and the foot ring are intact and are firmly attached.

(C) The cylinder is painted or coated to retard corrosion.

(D) The cylinder pressure relief valve indicates no visible damage, corrosion of operating components, or obstructions.

(E) There is no leakage from the cylinder or its appurtenances that is detectable without the use of instruments.

(F) The cylinder is installed on a firm foundation and is not in contact with the soil.

(G) A cylinder that passes the visual examination shall be marked with the month and year of the examination followed by the letter “E” (for example, 10-01E, indicating requalification in October 2001 by the external inspection method) and the requalifier identification number (RIN) in accordance with the requalifying agency’s permit issued by the United States Department of Transportation.

(H) The results of the visual inspection shall be documented, and a record of the inspection shall be retained for a 5-year period or until the cylinder is again requalified, whichever occurs first.

Delete section 6.6.7.1 and insert in lieu thereof the following:

**6.6.7.1** Installation of permanent, stationary containers on roofs of buildings shall be prohibited.

Delete section 6.6.7.2.

Delete section 6.9.3.14 and insert in lieu thereof the following new section:

**6.9.3.14** Underground metallic piping shall be protected against corrosion as warranted by soil conditions (see section 6.16). Underground gas piping that is outside a building shall not be in physical contact with any concrete.

Delete sections 6.14, 6.14.1, 6.14.2, and 6.14.3.

Delete paragraph 6.19.1.2(C) and insert in lieu thereof the following new paragraph:

**6.19.1.2(C)** Cylinders installed permanently on roofs of buildings shall be prohibited.

Delete section 6.19.11.1, including paragraphs (A) through (F), and insert in lieu thereof the following new section:

**6.19.11.1** Cylinders installed permanently on roofs of buildings shall be prohibited.

Delete section 6.19.11.2.

Delete section 7.2.1.1 and insert in lieu thereof the following new section:

**7.2.1.1** Transfer operations shall be conducted by qualified personnel meeting the provisions of rule 661—226.4(101).

Delete section 11.2 and insert in lieu thereof the following new section:

**11.2** Each person engaged in installing, repairing, filling, or otherwise servicing an LP-gas engine fuel system shall be trained in accordance with rule 661—226.4(101) and trained under the applicable installation and maintenance procedures established by the manufacturer.

Delete section 3801.2.

Delete section 3801.3 and insert in lieu thereof the following new section:

**3801.3** Construction documents. Where a single container is more than 2,000 gallons (7,570 L) in water capacity or the aggregate capacity of containers is more than 4,000 gallons (15,140 L) in water capacity, the installer shall submit construction documents for such installation to the fire marshal for review and approval. Installation shall not commence until written approval from the fire marshal has been received.

Delete section 3803.1 and insert in lieu thereof the following new section:

**3803.1** General. LP-gas equipment shall be installed in accordance with NFPA 54, ANSI Z223.1-2009 National Fuel Gas Code, 2009 edition, and NFPA 58, Liquefied Petroleum Gas Code, 2008 edition, except as otherwise provided in this chapter.

Delete section 3803.2.1.7 and insert in lieu thereof the following new section:

**3803.2.1.7** Use for food preparation. Where approved, listed LP-gas commercial food service appliances are allowed to be used for food preparation within restaurants and in attended commercial food-catering operations in accordance with NFPA 54, ANSI Z223.1-2009 National Fuel Gas Code, 2009 edition, the International Mechanical Code, 2009 edition, and NFPA 58, Liquefied Petroleum Gas Code, 2008 edition.

Delete section 3803.3 and insert in lieu thereof the following new section:

**3803.3** Location of equipment and piping. Equipment and piping shall not be installed in locations where such equipment and piping are prohibited by NFPA 54, ANSI Z223.1-2009 National Fuel Gas Code, 2009 edition.

Delete sections 3804 through 3804.4.

Delete section 3805.1 and insert in lieu thereof the following new section:

**3805.1** Nonapproved equipment. LP-gas shall not be used for the purpose of operating devices or equipment unless such device or equipment is approved for use with LP-gas in accordance with NFPA 58, Liquefied Petroleum Gas Code, 2008 edition, sections 1.5 through 1.5.3.

Delete section 3806.1 and insert in lieu thereof the following new section:

**3806.1** Attendants. Transfer operations shall be conducted by qualified personnel meeting the provisions of rule 661—226.4(101).

Amend sections 3803.2.1.6, 3809.3, and 3809.9, exception 3 to section 308.1.4, and the exception to section 3809.7 by deleting the phrase “water capacity of 2½ pounds” and inserting in lieu thereof the phrase “water capacity of 2.7 pounds.”

Delete section 3809.10 and insert in lieu thereof the following new section:

**3809.10** Storage within buildings not accessible to the public. The maximum quantity allowed in one storage location in buildings not accessible to the public, such as industrial buildings, shall not exceed a water capacity of 735 pounds (334 kg) (nominal 300 pounds (136 kg) of LP-gas). Where additional storage locations are required on the same floor within the same building, they shall be approved by the authority having jurisdiction. Storage beyond these limitations shall comply with section 3809.11.

[ARC 9235B, IAB 11/17/10, effective 1/1/11]